

IN THE CLAIMS

1. (Original) A synthetic nucleic acid sequence comprising 10-30 consecutive nucleotides of at least one of the following:
 - (a) the N gene region of the SARS-associated corona virus genome; and
 - (b) the 3' non-coding region of the SARS-associated corona virus genome.
2. (Original) A composition comprising the synthetic nucleic acid sequence of claim 1.
3. (Currently Amended) ~~Use of the synthetic nucleic acid sequence of claim 1 in a kit~~ A method for determining the presence or absence of SARS-associated corona virus in a biological sample which comprises utilizing the synthetic nucleic acid sequence of claim 1 in a kit.
4. (Original) A synthetic nucleic acid sequence comprising 10-30 consecutive nucleotides of a nucleic acid sequence that is complementary to at least one of the following:
 - (a) the N gene region of the SARS-associated corona virus genome; and
 - (b) the 3' non-coding region of the SARS-associated corona virus genome.
5. (Original) A composition comprising the synthetic nucleic acid sequence of claim 4.
6. (Currently Amended) ~~Use of the synthetic nucleic acid sequence of claim 4 in a kit~~ A method for determining the presence or absence of SARS-associated corona virus in a biological sample which comprises utilizing the synthetic nucleic acid sequence of claim 4 in a kit.
7. (Original) A synthetic nucleic acid sequence comprising 10-30 consecutive nucleotides of the nucleic acid sequence of SEQ ID NO: 1 or of a nucleic acid sequence that is complementary to the nucleic acid sequence of SEQ ID NO: 1.

8. (Original) A primer set for determining the presence or absence of SARS-associated corona virus in a biological sample, wherein the primer set comprises at least one synthetic nucleic acid sequence selected from the group consisting of:

(a) a synthetic nucleic acid sequence comprising 10-30 consecutive nucleotides of at least one of the following:

- (i) the N gene region of the SARS-associated corona virus genome; and
- (ii) the 3' non-coding region of the SARS-associated corona virus genome;

and

(b) a synthetic nucleic acid sequence comprising 10-30 consecutive nucleotides of a nucleic acid sequence that is complementary to at least one of the following:

- (i) the N gene region of the SARS-associated corona virus genome; and
- (ii) the 3' non-coding region of the SARS-associated corona virus genome.

9. (Original) The primer set of claim 8, wherein the at least one synthetic nucleic acid sequence has a nucleotide sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, and SEQ ID NO: 16, and a fragment, variant, and derivative thereof.

10. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 2, or a fragment, variant, or derivative thereof.

11. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 3, or a fragment, variant, or derivative thereof.

12. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 4, or a fragment, variant, or derivative thereof.

13. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 5, or a fragment, variant, or derivative thereof.

14. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 6, or a fragment, variant, or derivative thereof.

15. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 7, or a fragment, variant, or derivative thereof.

16. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 8, or a fragment, variant, or derivative thereof.

17. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 9, or a fragment, variant, or derivative thereof.

18. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 10, or a fragment, variant, or derivative thereof.

19. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 11, or a fragment, variant, or derivative thereof.

20. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 12, or a fragment, variant, or derivative thereof.

21. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 13, or a fragment, variant, or derivative thereof.

22. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 14, or a fragment, variant, or derivative thereof.

23. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 15, or a fragment, variant, or derivative thereof.

24. (Original) The primer set of claim 9, wherein the at least one synthetic nucleic acid sequence has the nucleotide sequence of SEQ ID NO: 16, or a fragment, variant, or derivative thereof.

25. (Original) A composition comprising the primer set of claim 8.

26. (Currently Amended) ~~Use of the primer set of claim 8 in a kit~~ A method for determining the presence or absence of SARS-associated corona virus in a biological sample which comprises utilizing the primer set of claim 8 in a kit.

27. (Original) A kit for determining the presence or absence of SARS-associated corona virus in a biological sample, comprising at least one synthetic nucleic acid sequence and instructions for use, wherein the at least one synthetic nucleic acid sequence is selected from the group consisting of:

(a) a nucleic acid sequence comprising 10-30 consecutive nucleotides of at least one of the following:

(i) the N gene region of the SARS-associated corona virus genome; and

(ii) the 3' non-coding region of the SARS-associated corona virus genome;

and

(b) a nucleic acid sequence comprising 10-30 consecutive nucleotides of a nucleic acid sequence that is complementary to at least one of the following:

- (i) the N gene region of the SARS-associated corona virus genome; and
- (ii) the 3' non-coding region of the SARS-associated corona virus genome.

28. (Original) The kit of claim 27, wherein the at least one synthetic nucleic acid sequence has a nucleotide sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, and SEQ ID NO: 16, and a fragment, variant, and derivative thereof.

29. (Original) A kit for determining the presence or absence of SARS-associated corona virus in a biological sample, comprising:

(a) a primer set comprising at least two synthetic nucleic acid sequences, wherein at least one of the at least two synthetic nucleic acid sequences is selected from the group consisting of:

(i) a nucleic acid sequence comprising 10-30 consecutive nucleotides of at least one of the following:

(A) the N gene region of the SARS-associated corona virus genome; and

(B) the 3' non-coding region of the SARS-associated corona virus genome; and

(ii) a nucleic acid sequence comprising 10-30 consecutive nucleotides of a nucleic acid sequence that is complementary to at least one of the following:

(A) the N gene region of the SARS-associated corona virus genome; and

(B) the 3' non-coding region of the SARS-associated corona virus genome; and

(b) instructions for use.

30. (Original) The kit of claim 29, wherein the at least one nucleic acid sequence has a nucleotide sequence selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, and SEQ ID NO: 16, and a fragment, variant, and derivative thereof.

31. (Original) The kit of claim 29, further comprising:
(c) suitable PCR reagents; and
(d) optionally, a positive and/or negative control for determining the presence or absence of SARS-associated corona virus.

32. (Original) The kit of claim 31, wherein the PCR reagents include a thermostable DNA polymerase and dNTP solutions.

33. (Original) A method for determining the presence or absence of SARS-associated corona virus in a biological sample, comprising the steps of:

(a) contacting the biological sample with at least one synthetic nucleic acid sequence, under conditions suitable for amplification; and
(b) determining the presence or absence of SARS-associated corona virus in the biological sample;

wherein the at least one synthetic nucleic acid sequence is selected from the group consisting of:

(i) a nucleic acid sequence comprising 10-30 consecutive nucleotides of at least one of the following:

(A) the N gene region of the SARS-associated corona virus genome; and

(B) the 3' non-coding region of the SARS-associated corona virus genome; and

(ii) a nucleic acid sequence comprising 10-30 consecutive nucleotides of a nucleic acid sequence that is complementary to at least one of the following:

(A) the N gene region of the SARS-associated corona virus genome; and

(B) the 3' non-coding region of the SARS-associated corona virus genome.

34. (Original) The method of claim 33, wherein the biological sample is obtained from a subject suspected of having SARS.